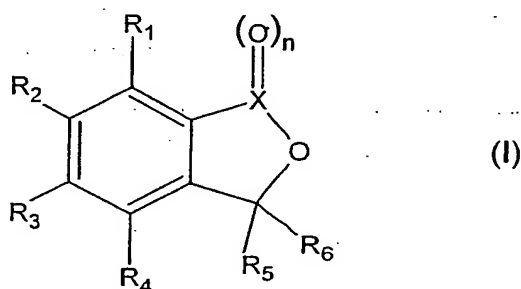
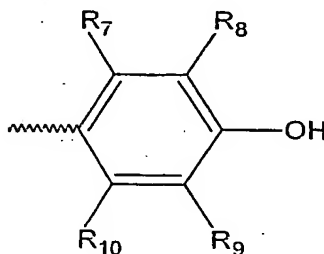


## CLAIMS

1. Test system for the determination of the presence of an antibiotic in a fluid comprising a test medium comprising a microorganism, at least one substance that provides a solid state and an indicator suitable for the detection of penicillin G,  
 5 characterized in that said indicator is a compound having the general formula:



wherein  $R_1$ ,  $R_2$ ,  $R_3$  and  $R_4$  are independently of each other alkyl, halogen or hydrogen,  
 $X = C$  or  $S$ ,  $n = 1$  if  $X = C$  and  $n = 0, 1$  or  $2$  if  $X = S$ , and  $R_5$  and  $R_6$  are independently of  
 10 each other:



wherein  $R_7$ ,  $R_8$  and  $R_9$  are, independently of each other alkyl, branched alkyl, hydrogen or  
 halogen and  $R_{10}$  is alkyl or branched alkyl, or salts thereof.

- 15 2. Test system according to claim 1 wherein  $R_{10}$  is methyl.
3. Test system according to claim 2 wherein said indicator is Bromothymol Blue.
4. Method for the determination of the presence of an antibiotic in a fluid comprising  
 20 the steps of:
- (a) contacting a sample of said fluid with a test medium comprising a micro-  
 organism, at least one substance that provides a solid state and an indicator;

(b) incubating the microorganism for a period of time to grow the microorganism in case no antibiotic is present in the fluid sample; and  
(c) detecting growth or inhibition of growth of the microorganism with the indicator, characterized in that said test system is a test system according to any one of  
5 claims 1 to 3.

5. Method according to claim 4 wherein the antibiotic to be determined is a  $\beta$ -lactam antibiotic.

10 6. Method according to any one of claims 4 to 5 wherein the fluid in which antibiotics are to be determined is a fluid obtainable from an animal or human body.

7. Method according to any one of claims 4 to 6 wherein the ratio of the volume of said fluid to the volume of test medium exceeds 0.68:1.

15 8. A method according to any one of claims 4 to 7, wherein the ratio of the volume of liquid sample to the volume of test medium exceeds 20:27 (0.74:1) (v/v), 25:27 (0.93:1) (v/v) or 2:1 (v/v).

20 9. A method according to any one of claims 4 to 8, wherein the volume of liquid sample is greater than the volume of test medium.

25 10. Kit suitable for the determination of an antibiotic in a fluid comprising a container partially filled with a test medium comprising a microorganism, a gelling agent and an indicator, characterized in that said indicator is a compound with the general formula (I).

11. Kit according to claim 8 further comprising nutrients suitable for allowing the microorganism to grow.

30 12. Kit according to any one of claims 10 to 11, further comprising a thermostatic device, with the aid of which test samples can be kept at a pre-set temperature.

13. Kit according to any one of claims 10 to 12, further comprising a data carrier loaded with a computer program suitable for instructing a computer to analyze digital data

obtained from a sample-reading device.

14. Use of a compound having the general formula (I) as indicator in a test system for an antibiotic.

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15. Use according to claim 14 wherein the antibiotic is a  $\beta$ -lactam antibiotic.